



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,340	01/03/2007	Paul Cook	65200(71946)	2239
21874	7590	10/16/2008	EXAMINER	
EDWARDS ANGELL PALMER & DODGE LLP			BURCH, MELODY M	
P.O. BOX 55874			ART UNIT	PAPER NUMBER
BOSTON, MA 02205			3657	
MAIL DATE	DELIVERY MODE			
10/16/2008	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/574,340	COOK, PAUL	
	Examiner	Art Unit	
	Melody M. Burch	3657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 January 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 19-39 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 19-39 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 March 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/31/06</u> . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the mounting location having a predetermined footprint and including predetermined fastener positions as recited in claim 34 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

4. The disclosure is objected to because of the following informalities: the specification fails to provide the proper headings particular to US Patent format such as "Summary of the Invention", "Brief Description of Drawings", etc.
Appropriate correction is required.

Claim Objections

5. Claim 23-33 is objected to because of the following informalities: the phrase "the buffer member" first recited in lines 3-4 of 23 should be changed to --the one or more buffer members-- to maintain language consistent with earlier recited claim language. Appropriate correction is required. The remaining claims are objected to due to their dependence from claim 23.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 22, 32, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 22. The phrase "the lobe" in line 3 is indefinite. It is unclear to the Examiner as to which lobe Applicant intends to refer to since there were a plurality of earlier recited lobes.

Re: claim 32. The phrase "the further buffer" in line 2 of claim 32 is indefinite. It is unclear to the Examiner as to which of the further buffers Applicant intends to refer to since in claim 30 Applicant recites "further buffers". Applicant should be clear and consistent when referring to the buffers since there are several references to buffers throughout the claims (buffer members, resilient material buffer, first buffer, second buffer).

Clarification is required. The remaining claim is indefinite due to its dependence from claim 32.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 19, 20, 23-25, 28, 30-33, 38, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6435489 to Rice et al.

Re: claim 19, 20, 24, 25, 28, 30, and 31. Rice et al. show in figures 1-3 a vibration mounting comprising a base member 16 for mounting to a mounting location and a support member 26 for supporting a load, the support member being spaced apart from the base member in a load-bearing direction by a vibration isolating element 36 of a resilient material, the vibration mounting having a centre-line in said load-bearing direction; wherein the vibration isolating element comprises a plurality of lobes shown in figure 5B that are separated by elements 68, one of which shown at the end of the lead line of number 42' and including element 50' on each side of a plane passing through said centre-line, wherein each lobe extends from the base member towards the support member and also extends in a lateral direction different from that of other lobes, and wherein each lobe has an upper surface shown in the area to the right or left of the end of the lead line of number 68 engaging the support member as shown in figure 1 and at least one free surface shown at the end of the lead line of number 42'.

Re: claim 23. Rice et al. show in figures 1 and 3 the limitation wherein the support member 26 comprises one or more buffer members 28 extending towards the base member circumferentially between adjacent lobes of the vibration isolating element such that the buffer member contacts a resilient material buffer 46 secured to the base member by way of intervening elements when vibration displacements exceed a predetermined amplitude. The claim language does not preclude contact prior to exceeding the predetermined amplitude as broadly recited.

Re: claims 29 and 37. Rice et al. show in figure 1 the vibration mounting further comprising a secondary buffer 38 and the elastomeric material on the other side of element 38 for further increasing resistance to displacement beyond a second predetermined amplitude of vibration displacement in the first direction.

Re: claims 32, 33, 38 and 39. Rice et al. show in figures 1-3 a vibration mounting comprising: a base member 16 for mounting to a mounting location; a support member 26 for supporting a load, the support member being spaced apart from the base member in a load-bearing direction by a vibration isolating element 36 of a resilient material, the vibration isolating element comprising a plurality of lobes one of which shown at the end of the lead line of 42' in figure 5B extending from the base member towards the support member; and buffer means comprising a first buffer or the upper portions of element 36 shown in figure 1 for increasing resistance to displacement of the support member relative to the base member in the load-beating direction beyond a positive displacement threshold and a second buffer 52 for increasing resistance to a negative displacement beyond a negative displacement threshold.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice et al. in view of US Patent 4651978 to Grafstrom.

Re: claim 21. Rice et al. describe the invention substantially as set forth above including the limitation of the lobes being arranged to extend outwardly from a central portion of the vibration isolating element at an angle to the base member, an outward end of each lobe engaging a corresponding portion of the support member, but are silent with regards to the base member having a raised portion to which the vibration isolating element is secured.

Grafstrom teaches in figure 1 the use of a vibration mounting having a base member 15, 16, 27 having a raised portion 16 secured to a vibration isolating element 17.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the base member of Rice et al. to have included a raised portion secured to the vibration isolating element, as taught by Grafstrom, in order to provide a means of improving the attachment of the vibration isolating element to the base member to reduce the risk of separation to enhance product reliability.

Re: claim 22. Each lobe also includes each corresponding portion 48' or 50'. The support member portions that are end portions extending towards the base member bear against an outer end surface of the lobe as shown in figure 1.

12. Claims 23-25, 28-33, and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Rice et al.

Re: claim 23-25, 28, 30, and 31. Rice et al. show in figures 1 and 3 the limitation wherein the support member 26 comprises one or more buffer members 28 extending towards the base member circumferentially between adjacent lobes of the vibration

isolating element such that the buffer member contacts a resilient material buffer 46 secured to the base member by way of intervening elements.

Rice et al. disclose the limitation wherein the buffer member contacts a resilient material buffer when vibration displacements exceed a predetermined amplitude particularly when the dimensions of elements 48' and 50' are varied such that they are narrow as disclosed in col. 4 lines 40-51.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the dimensions of elements 48' and 50' in order to achieve the contact when vibration displacements exceed a predetermined amplitude, as taught by Rice et al., in order to provide a means of adjusting the cushion rate depending on application.

Re: claims 29 and 37. Rice et al., as modified, teach in figure 1 of Rice et al. the vibration mounting further comprising a secondary buffer 38 and the elastomeric material on the other side of element 38 for further increasing resistance to displacement beyond a second predetermined amplitude of vibration displacement in the first direction.

Re: claims 32 and 33. Rice et al., as modified, teach in figures 1-3 of Rice et al. a vibration mounting comprising: a base member 16 for mounting to a mounting location; a support member 26 for supporting a load, the support member being spaced apart from the base member in a load-bearing direction by a vibration isolating element 36 of a resilient material, the vibration isolating element comprising a plurality of lobes one of which shown at the end of the lead line of 42' and including 50' in figure 5B

extending from the base member towards the support member; and buffer means comprising a first buffer or the upper portions of element 36 shown in figure 1 for increasing resistance to displacement of the support member relative to the base member in the load-beating direction beyond a positive displacement threshold and a second buffer 52 for increasing resistance to a negative displacement beyond a negative displacement threshold.

13. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rice et al. in view of JP-02186155 (JP'155).

Rice et al. are silent with regards to the resilient material buffer being provided with means for reducing friction when contacting the buffer member.

JP'155 teaches in figure 2 a vibration mounting including a means 7 for reducing friction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the resilient material buffer of Rice et al. to have been provided with means for reducing friction, in view of the teachings of JP'155, in order to provide a means of reducing friction between the support member and the resilient material buffer during possible relative rotational motions and during excessive impacts resulting from lateral loads.

14. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rice et al. in view of JP-02186155 (JP'155), as applied to claim 26 above, and further in view of US Patent 3504508 to Bornzin.

Bornzin teaches in col. 4 lines 3-5 the use of a friction reducing means in the form of nylon.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the friction reducing means of Rice et al., as modified, to have included nylon, as taught by Bornzin, in order to provide an antifriction material to serve as a buffering region, as taught by Bornzin.

With regards to the nylon elements being plates (as opposed to a band as taught in Bornzin), Examiner notes that in *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration was significant. Examiner notes that a band may be segmented into multiple plates to serve the same anti-friction purpose but reduce material costs and assembly weight.

15. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice et al. in view of US Patent 2903208 to Everitt.

Re: claims 34 and 35. Rice et al. are silent with regards to the mounting location having a footprint and fastener positions.

Everitt teaches in figures 2-4 the use of a vibration mounting having a mounting location having a footprint and including predetermined fasteners positions shown around elements 34 within the footprint for securing the base member, the vibration mounting being seized to fit the footprint.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the mounting location to having had a footprint and include fastener positions, as taught by Everitt, in order to provide a means of securely attaching the vibration mounting to an automobile frame, for example.

Re: claim 36. Examiner notes that since the lobes of Rice et al. are elevated from the base member, they are arranged so as to allow access to and not interfere with fastener positions.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents: 4012071 to Jones et al., 3371899 to Johnson, 6698733 to Larmande, 2642252 to Pietz, and 2697578 to Whittam teach the use of vibration mountings having a base member and a support member with an intervening vibration isolating element.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb
October 13, 2008

/Melody M. Burch/
Primary Examiner, Art Unit 3657